

REMARKS/ARGUMENTS

This amendment is submitted in response to the Office Action dated January 30, 2007. Reconsideration and allowance are requested.

Claims 13, 15-23, and 73-76 remain in this application. Claims 1-12, 14, and 24-72 have been canceled. Claims 73-76 are new claims added by this amendment.

Claim Rejection under 35 USC 103

In the Office Action, claims 13, 15-17 and 21-23 were rejected under 35 USC § 103(a) as being unpatentable over Higgins III (U.S. Patent 5639989) in view of Phelps (U.S. Patent 5847317). Claim 15 was rejected under 35 USC § 103(a) as being unpatentable over Higgins III/Phelps as applied to claim 13 above, and further in view of Chant (U.S. Patent 4797508). Claims 18 and 19 was rejected under 35 USC § 103(a) as being unpatentable over Higgins III/Phelps as applied to claim 13 above, and further in view of Askew (U.S. Patent 6350951). Claim 20 was rejected under 35 USC § 103(a) as being unpatentable over Higgins III/Phelps as applied to claim 13 above, and further in view of Gabower (*Thermoformed Vacuum Metallized Inserts For EMI Shielding of Electronic Devices*, Consumer Electronics Show, Flamingo Hilton and Tower, Las Vegas, Nevada pp. 151 - 158). The Applicant does not agree that the pending claims are obvious under the cited references.

Regarding claims 13, 15-17 and 21-23

Higgins appears to be directed at shielding an electronic component as opposed to shielding a circuit board or flexible circuitry as recited in the claims. Additionally, Phelps is directed at vacuum metallizing a conductive layer over the insulating base coating located on a plastic frame that is subsequently mounted over a circuit board. Neither of these references teaches or suggests vacuum metallizing a first conductive layer over the insulating base coating that encapsulates a portion of the circuit board or flexible circuitry, as claimed. The Applicant believes that this difference is not obvious because one skilled in the art would not have been motivated to place a circuit board into a vacuum metallization chamber because of problems that

can occur during the metallization process such as out-gassing, or shorting of circuits and/or electronic components located on the circuit board, etc.

Nevertheless in an effort to expedite prosecution, independent claim 13 has been amended to further specify that not just one electronic component is coated with a vacuum metallized film but rather a portion of a circuit board or flexible circuitry which includes more than one electronic component. Neither Higgins nor Phelps discloses this limitation. Therefore, the Applicant believes that claim 13 is patentable over Higgins in view of Phelps.

Regarding claim 15

The Examiner argued that "Chant teaches the step of maintaining the temperature of the electronic component and insulating base coating below 200° C during vacuum metallizing (col. 9 lines 1-9)." The Applicant respectfully disagrees. In column 9 lines 1-9, Chant teaches curing the coating **after vacuum metallization, not during vacuum metallization**, by subjecting the coating to a temperature of 280° F for three hours. Specifically, column 9 lines 1-9 of Chant read (with relevant portion in bold):

The process as set forth in Example One is substantially repeated except that the coating has a thickness of about $1.5\text{-}2.0 \times 10^{-3}$ inch, and **the final curing step is effected after the formation of the vacuum metallized deposit by subjecting the partially processed board to a temperature of 280° F. for 3 hours at 250 p.s.i.** After the application of the heat and pressure in this step, the vacuum metallized deposit appears to be substantially embedded in the coating.

Since claim 15 recites maintaining a temperature of the electronic component and insulating base coating below approximately 200° C during vacuum metallizing, Chant does not teach the limitation of claim 15. Therefore, the Applicant believes that claim 15 is patentably distinct over Higgins III/Phelps as applied to claim 13, and further in view of Chant. Additionally, since claim 15 depends from claim 13, and claim 13 is patentable for the reasons argued above, the Applicant believes that claim 15 is also patentable for those same reasons.

Regarding claims 18 and 19

The Examiner argued Higgins/Phelps fails to teach applying an insulating conformal layer over the first conductive layer but that "Askew discloses the step of applying an insulating layer over the first conductive layer of an EMI shield (column 3, lines 30-32)." The Applicant respectfully disagrees. As with Phelps, Askew is directed at vacuum metallizing a conductive layer on a frame that is subsequently mounted over a printed circuit board. Askew fails to teach or suggest vacuum metallizing a first conductive layer over the insulating base coating that encapsulates a portion of the circuit board or flexible circuitry, as claimed. Askew's insulating layer cannot be an insulating conformal layer over the first conductive layer, because Askew's insulating layer cannot conform since it is not applied to the layers already deposited on the circuit board but rather to the frame that will be subsequently used to cover the electronic components on the circuit board. Therefore, the Applicant believes that claims 18 and 19 are patentably distinct over Higgins III/Phelps as applied to claim 13, and further in view of Askew. Additionally, since claims 18 and 19 depend from claim 13 and claim 13 is patentable for the reasons argued above, the Applicant believes that claims 18 and 19 are also patentable for those same reasons.

Regarding claim 20

Since claim 20 depends from claim 13 and claim 13 is patentable for the reasons argued above, the Applicant believes that claim 20 is also patentable for those same reasons.

New Claims 73-76

Claims 73-76 are new claims added by this amendment. The Applicant believes that no new matter has been added and that support for these new claims can be found throughout the specification. For example, support for new claims 73-74 can be found throughout the originally filed specification including page 7 lines 23-30. Support for claim 75 can be found throughout the originally filed specification including page 8 lines 26-30. Support for claim 76 can be found throughout the originally filed specification including page 9 lines 1-7.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

/Jesus Del Castillo/

Jesus Del Castillo
Reg. No. 51,604

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
JDC:gjs
60989750 v1